

## **Claims**

1. A carrier for diagnostics and/or follow-up of a Treponema infection, comprising
  - a) at least one immobilized cardiolipin and
  - b) at least one immobilized Treponema-specific antigen.
2. The carrier according to claim 1, characterized in that the cardiolipin is present together with lecithin and cholesterol as VDRL antigen, said products being preferably present in a mass ratio of cardiolipin : lecithin : cholesterol of 0.1-4.0 : 1-5.0 : 1-10.
3. The carrier according to any one of claims 1 or 2, characterized in that the cardiolipin is present in at least two, preferably at least three, particularly preferably at least four different concentrations at different positions of the carrier.
4. The carrier according to any one of claims 1 to 3, characterized in that at least two, preferably at least three, particularly preferably at least four different Treponema antigens are present in different positions on the carrier.
5. The carrier according to any one of claims 1 to 4, characterized in that the antigens are selected from Treponema pallidum-specific antigen, preferably the 15kD, 17 kD, 44.5 kD and 47 kD antigen.
6. The carrier according to any one of claims 1 to 5, characterized in that the carrier comprises further controls.
7. The carrier according to any one of claims 1 to 6, characterized in that one control is a serum control, preferably protein A.

8. The carrier according to any one of claims 1 to 6, characterized in that one control is a cut-off control, preferably comprising purified human immunoglobulin.
9. The carrier according to any one of claims 1 to 5, characterized in that it comprises a serum control which preferably comprises protein A and a cut-off control which preferably comprises human immunoglobulin.
10. The carrier according to any one of claims 1 to 9, characterized in that the carrier is selected from nitrocellulose, PVDF (polyvinylidene difluoride), nylon, cellulose acetate, polystyrene.
11. The carrier according to any one of claims 1 to 10, characterized in that the carrier is designed as a test strip for use in immunodiagnostics.
12. The carrier according to any one of claims 1 to 11, characterized in that the carrier is designed as an immunoblot.
13. The carrier according to any one of claims 1 to 12, characterized in that the VDRL antigen bands applied to the carrier allow a differentiation between anti-VDRL-IgG and anti-VDRL-IgM antibodies after reaction with a patient's sample, preferably selected from blood, serum, plasma, liquor or synovial fluid.
14. A method for diagnostics and/or follow-up of a Treponema infection, characterized in that a carrier according to any one of claims 1 to 13 is contacted with a patient's sample and the presence of antibodies against a Treponema antigen and/or a cardiolipin is determined.
15. The method according to claim 14, characterized in that the reactivity of antibodies from a patient's serum with the cardiolipin of the test strip is determined several times over a prolonged period of time.

16. The method according to any one of claims 14 or 15, characterized in that the patient's sample is blood, serum, plasma, liquor or synovial fluid.
17. The method according to any one of claims 14 to 16, characterized in that the assessment is performed through the evaluation software ViraScan®.
18. The method according to any one of claims 14 to 17, characterized in that anti-VDRL-IgG and anti-VDRL-IgM antibodies are differentiated in a patient's sample.
19. A test kit for the diagnosis of a Treponema infection and/or the follow-up of a Treponema infection, comprising a carrier according to any one of claims 1 to 13 and further reagents as well as an instruction manual for carrying out the detection method.
20. Use of a carrier according to any one of claims 1 to 13 in diagnostics and/or follow-up of a Treponema infection.